FPL

October 7, 2015

L-2015-252
10 CFR 50.73

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Re: St. Lucie Unit 1
Docket No. 50-335
Reportable Event: 2015-001-00
Date of Event: August 9, 2015

Reactor Trip While Performing Reactor Protection System Logic Matrix Test

The attached Licensee Event Report 2015-001-00 is being submitted pursuant to the requirements of 10 CFR 50.73 to provide notification of the subject event.

Sincerely,

Christopher R. Costanzo

Christopher R. Costanzo
Site Vice President
St. Lucie Plant

CRC/rcs

Attachment

IE22
NRR

NRC FORM 366 (02-2014) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 1/31/2017

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resourse@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

LICENSEE EVENT REPORT (LER)

1. FACILITY NAME	2. DOCKET NUMBER	3. PAGE
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4. TITLE
Reactor Trip While Performing Reactor Protection System Logic Matrix Test

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
08	09	2015	2015	- 001 -	00	10	07	2015	NA	
									FACILITY NAME: NA	DOCKET NUMBER

9. OPERATING MODE
1

10. POWER LEVEL
100%

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR§: (Check all that apply)

- ☐ 20.2201(b)
- ☐ 20.2201(d)
- ☐ 20.2203(a)(1)
- ☐ 20.2203(a)(2)(i)
- ☐ 20.2203(a)(2)(ii)
- ☐ 20.2203(a)(2)(iii)
- ☐ 20.2203(a)(2)(iv)
- ☐ 20.2203(a)(2)(v)
- ☐ 20.2203(a)(2)(vi)
- ☐ 20.2203(a)(3)(i)
- ☐ 20.2203(a)(3)(ii)
- ☐ 20.2203(a)(4)
- ☐ 50.36(c)(1)(i)(A)
- ☐ 50.36(c)(1)(ii)(A)
- ☐ 50.36(c)(2)
- ☐ 50.46(a)(3)(ii)
- ☐ 50.73(a)(2)(i)(A)
- ☐ 50.73(a)(2)(i)(B)
- ☐ 50.73(a)(2)(i)(C)
- ☐ 50.73(a)(2)(ii)(A)
- ☐ 50.73(a)(2)(ii)(B)
- ☐ 50.73(a)(2)(iii)
- ☒ 50.73(a)(2)(iv)(A)
- ☐ 50.73(a)(2)(v)(A)
- ☐ 50.73(a)(2)(v)(B)
- ☐ 50.73(a)(2)(v)(C)
- ☐ 50.73(a)(2)(v)(D)
- ☐ 50.73(a)(2)(vii)
- ☐ 50.73(a)(2)(viii)(A)
- ☐ 50.73(a)(2)(viii)(B)
- ☐ 50.73(a)(2)(ix)(A)
- ☐ 50.73(a)(2)(x)
- ☐ 73.71(a)(4)
- ☐ 73.71(a)(5)
- ☐ OTHER
  Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

NAME	TELEPHONE NUMBER (Include Area Code)
Richard Sciscente - Principal Engineer, Licensing	772-467-7156

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURE	REPORTABLE TO EPIX
A	JC	94	C490	YES					

14. SUPPLEMENTAL REPORT EXPECTED
☐ YES *(If yes, complete 15. EXPECTED SUBMISSION DATE)* ☒ NO

15. EXPECTED SUBMISSION DATE

MONTH	DAY	YEAR

ABSTRACT *(Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)*

On August 9, 2015 with St. Lucie Unit 1 in Mode 1 at 100% reactor power, an unplanned reactor trip occurred. The trip occurred while Operators were performing a reactor protection system (RPS) logic matrix test in which the individuals performing the test did not follow the procedure steps in sequence resulting in a loss of configuration control. As a result, a set of reactor trip circuit breakers (TCBs) was opened before ensuring that all TCBs tested in the previous test section had been closed.

Corrective actions include procedure revisions to the test methodology to ensure configuration control of the TCBs is maintained through additional verification techniques.

This reactor trip event is reportable pursuant to 10 CFR 50.73(a)(2)(iv)(A) as an actuation of the reactor protection system (RPS). This event had no significant safety consequence since the RPS successfully performed its intended safety function upon opening the trip circuit breakers.

This event had no effect on the health and safety of the public.

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CONTINUATION SHEET

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NARRATIVE

Description of the Event

On August 9, 2015 with St. Lucie Unit 1 in Mode 1 at 100% reactor power, an unplanned reactor trip occurred. The trip occurred while Operators were performing a reactor protection system (RPS) logic matrix test. The logic matrix test involves opening and closing sets of reactor trip circuit breakers (TCBs). The team performing the test had worked through approximately half of the test before taking a break between test sections. It was at this point that the team progressed through a section without completing all of the steps in that section. The team did not implement acceptable placekeeping and unknowingly lost configuration control when they inadvertently left two TCBs open that should have been closed.

After the break when the test resumed, the test personnel did not perform a jobsite review. As they recommenced the test a reactor trip occurred when the next set of trip circuit breakers was opened.

Cause

The individuals performing the logic matrix test did not follow the test procedure, resulting in a loss of configuration control during the test.

Analysis of the Event

During the logic matrix testing, the individuals performing the role of the reader-doer did not restore two TCBs to their normal closed position, resulting in a loss of configuration control during the test. Had they maintained awareness of the configuration of the TCBs through proper verification techniques, then the two TCBs would have been closed prior to moving on to the next section of the logic matrix test procedure, and the reactor trip would not have occurred.

Safety Significance

This reactor trip event is reportable pursuant to 10 CFR 50.73(a)(2)(iv)(A) as an actuation of the RPS. This event had no significant safety consequence. All safety related systems functioned as designed. There were no safety systems actuations as a result of the trip.

With no complications and all systems responding as designed, the associated risk impact is considered very small. Given the response of the plant and the insignificant risk, the health and safety of the public were not affected by this event.

Corrective Actions

The corrective action listed below has been entered into the site corrective action program. Any changes to the action will be managed under the corrective action program.

1. To correct the problem, the procedure for performing the RPS logic matrix test is being revised to ensure configuration control of the TCBs is maintained through additional verification techniques.

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NARRATIVE

Failed Component(s)

None

Manufacturer

Combustion Engineering Inc.